

# Magnetic gripper

## SGM-HP 20 G1/8-IG

<https://www.schmalz.com/10.01.17.00424>



Part no.: 10.01.17.00424

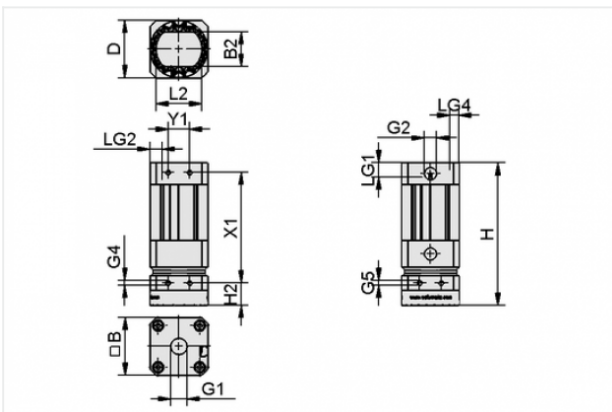
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## Magnetic gripper for handling metal sheets with holes



Size: 20  
 Socket: G1/8"-F  
 Holding force max: 28 N  
 Holding force max friction ring: 19 N  
 Pressure range (operating pressure):  
 2.5 ... 6.0 bar

### Design Data



Attribute	Value
B	20 mm
B2	9.1 mm
D	20 mm
G1	G1/8"-F
G2	M5-F
G4	M3-F
G5	M3-F
H	78.2 mm
H2	12.7 mm
L2	12 mm
LG1	6 mm
LG2	5.5 mm
LG4	4 mm

### Contact to Schmalz

J. Schmalz GmbH | Johannes-Schmalz-Straße, 72293 Glatten, Deutschland | +49 7443 2403-102 | [customercenter@schmalz.de](mailto:customercenter@schmalz.de)

Attribute	Value
X1	55 mm
Y1	6.5 mm

## Technical Data

Attribute	Value
Holding force max	28 N
Holding force max friction ring	19 N
Sheet thickness opt f. holding force max	1 mm
Holding force 2mm-sheet	25 N
Holding force 2mm-sheet friction ring	16 N
Lateral force	9 N
Lateral force (oily surface)	9 N
Remaining force	0.3 N
Pressure range (operating pressure)	2.5 ... 6.0 bar
Installation position	Any
Control	Bistable
Ambient temperature	5 ... 70 °C
Weight	81 g

### Note:

- The specified holding forces are static values under optimal conditions (primarily depending on material and surface characteristics). For system designs, a safety factor of  $S = 3$  must be applied.
- Holding forces SGM-HT-HP at 20 °C; can be used for workpiece temperatures up to 350 °C (depending on process conditions), the influence of temperature can reduce holding forces by up to 30%

## Spare Parts



### NAEH-SCHA SMAGN-PNP S051

Part no. 10.01.17.00199

Proximity switch

Type: Magn. cylind. sensor-PNP

Voltage: 15-30V DC

Electrical connection:

Male connect M12, 4 pol



### NAEH-SCHA SMAGN-NPN S050

Part no. 10.01.17.00215

Proximity switch

Type: Magn. cylind. sensor-NPN

Voltage: 12-30V DC

Electrical connection:

Male connect M12, 4 pol



### REIB-RING SGM 20 PU-55

Part no. 10.01.17.00418

Friction ring

for: Magnetic gripper

Size: 20

External diameter D: 20 mm

Internal diameter d: 12 mm

## Accessories

### Contact to Schmalz

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**HTS-A2 AP SGM 20**  
Part no. 10.01.17.00414  
Holder system  
Cross-beam connection:  
Bolt with slot  $\varnothing$ 19mm  
Shape: with adapterplate  
for: Magnetic gripper  
Size: 20



**HTS-A3 AP SGM 20**  
Part no. 10.01.17.00413  
Holder system  
Cross-beam connection:  
Ball head 28.5 mm  
Shape: with adapterplate  
for: Magnetic gripper  
Size: 20



**ADP-E-TRI 20 SET**  
Part no. 10.01.17.00419  
Lifting elements for handling of round or non-flat  
components  
Size: 20  
Shape: triangle  
Workpiece diameter (min): 3 mm  
Workpiece diameter (max): 10 mm

**ADP-E-UNI 20 SET**

Part no. 10.01.17.00420

Lifting elements for handling of round or non-flat components

Size: 20

Shape: Rectangular

**VSL 6-4 PU**

Part no. 10.07.09.00002

Hose for vacuum and compressed-air systems

External diameter D: 6 mm

Internal diameter d: 4 mm

Length (max): 500 m

Material: PU

Installation radius (min): 35 mm

Pressure range (operating pressure):

-0.95 ... 10.00 bar

Ambient temperature: -20 ... 90 °C

**STV-GE M5-AG 6**

Part no. 10.08.02.00201

Screw plug connection, straight

Thread G1: M5-M

External hose diameter: 6 mm

Material: Brass

Surface: nickel plated

Ambient temperature: -20 ... 80 °C



**STV-W M5-AG 6**

Part no. 10.08.02.00235

Screw plug connection, swivelling elbow

Thread G1: M5-M

External hose diameter: 6 mm

Material: Brass, nickel-plated

Ambient temperature: -20 ... 80 °C



**MOD-SENS NAEH SGM-HP-20-PNP**

Part no. 10.01.17.00447

Sensor module

Type of sensor: Proximity switch

for: Magnetic gripper

Size: HP-20-PNP



**MOD-SENS NAEH SGM-HP-20-NPN**

Part no. 10.01.17.00448

Sensor module

Type of sensor: Proximity switch

for: Magnetic gripper

Size: HP-20-NPN